

Patent Claims

1. A component (1), in particular composite component for a support of a vehicle, comprising a basic body (2) with integrated air-conditioning system modules (K1 to K6), the basic body (2) extending in the transverse direction (Y direction) and in at least one further direction (X direction, Z direction).
5
- 10 2. The component as claimed in claim 1, the basic body (2) extending at least partly in the longitudinal direction (X direction) of the vehicle.
- 15 3. The component as claimed in claim 1 or 2, the basic body (2) extending at least partly in the vertical direction (Z direction) of the vehicle.
- 20 4. The component as claimed in one of claims 1 to 3, the basic body (2) extending in the direction of the foot region (I) and/or the rear part region (VII).
- 25 5. The component as claimed in one of claims 1 to 4, the basic body (2) being formed from at least two parts, in particular two half-shells (2a, 2b), which form cavities.
30
6. The component as claimed in claim 5, the two parts (2a, 2b) being interconnected positively and non-positively in the YZ plane or in the YX plane.
- 35 7. The component as claimed in one of claims 1 to 6, the basic body (2) forming a bearing basic hollow structure which has a T shape.
8. The component as claimed in claim 7, the basic body having further branching structures.

9. The component as claimed in one of claims 1 to 8, an air guide duct (K3) which is formed by at least one of the cavities of the basic body (2) being integrated as an air-conditioning system module (K1 to K4).

5

10. The component as claimed in claim 9, the air guide duct (K3) extending from a central region of the basic body (2) toward at least one side (V, VI), toward the floor (I) and/or toward the windshield (III) and being provided with a number of flow openings (4.2) for inlet and/or outlet of air.

15. The component as claimed in one of claims 1 to 10, an air mixer (LM) which is formed in one of the cavities of the basic body (2), in particular in the central region of the basic body (2) and/or at flow exit openings (4.2) of the basic body (2), being integrated as a further air-conditioning system module (K5).

20

25. The component as claimed in one of claims 1 to 11, an air distributor (LV) which is formed by one of the cavities of the basic body (2), in particular in the central region of the basic body (2), being integrated as a further air-conditioning system module (K6).

30. The component as claimed in claim 11 or 12, the air-conditioning system modules (K1 to K6) serving for conditioning the air forming a thermomodule (2.2) of the basic body (2).

35. The component as claimed in one of claims 1 to 13, at least one air-conducting element (6) for controlling the flow rate and for air distribution being integrated in the basic body (2).

15. The component as claimed in claim 14, the air-conducting element (6) being designed as a nozzle, a

flap, in particular a butterfly flap, a swing flap, a louver or roll band flap or cassette and/or a roller flap.

5 16. The component as claimed in claim 14 or 15, the air-conducting element (6) being provided in the air guide duct (K3) and/or at the beginning or at the end of the air guide duct (K3).

10 17. The component as claimed in one of claims 1 to 16, an air temperature control and air-conditioning unit, in particular an evaporator and a heating unit, being integrated in or attached to one of the cavities of the basic body (2) as an air-conditioning system module (K1, K2).

15 18. The component as claimed in one of claims 1 to 17, a filter being integrated in or attached to one of the cavities of the basic body (2) as an air-conditioning system module (K7).

20 19. The component as claimed in one of claims 1 to 18, further functional modules (F1, F2, F5), in particular a head-up display, an information display, a combined instrument, an audio and/or communication unit, a navigation unit and/or an operating and information unit, being integrated in or attached to one of the cavities of the basic body (2).

25 20. The component as claimed in one of claims 1 to 19, the basic body (2) being embodied as a finished part which is at least partly lined with plastic.

30 21. The component as claimed in one of claims 1 to 20, a thermomodule (2.2) having one or more air-conditioning system modules (K1 to K7) in each case being embodied as a finished part which is made at least partly of plastic.

22. The component as claimed in one of claims 1 to 21,
the thermomodule (2.2) consisting of plastic mounting
parts and/or the plastic mounting parts forming as
5 injected or injected-on plastic parts a rigidifying
structure for the basic body (2).

23. Use of a component as claimed in one of claims 1
to 22 as a transverse support for a vehicle.